

EXHIBIT I

MARS EXPLORATION PROGRAM OVERVIEW

PROGRAM OBJECTIVES, SCOPE, AND CHARACTER

The Mars Exploration Program (MEP) encompasses all NASA Mars robotic mission activities and analyses undertaken to characterize the solid planet and its atmosphere, geological history, climate, climate history, and the processes that may provide insight into climate change on Earth; to determine what resources it might provide for future exploration; and to search for evidence of extinct or extant life on Mars. The MEP missions will also support data collection and technology demonstrations critical to planning and carrying out future human missions to Mars.

The Mars Exploration Program is a science-driven, technology-enabled effort to characterize and understand Mars. Chief among the questions to be addressed by the Program is: “Did life ever arise on Mars?”

KEY PROGRAM REQUIREMENTS AND CONSTRAINTS FROM THE PROGRAM COMMITMENT AGREEMENT AND PROGRAM PLAN

- The MEP shall be designed to fit within the approved funding profile.
- The Program shall seek to launch at least one mission at each Mars opportunity, consistent with Program resources and technical feasibility.
- Each mission within the Program shall contribute to both science and technology objectives of the Program.
- New technology shall be incorporated into planned missions only after it has reached suitably mature Technology Readiness Levels (TRL).
- The Program shall avoid major increases in technical or programmatic risk from one mission to the next.
- Each mission within the Program shall be designed to feed forward validated technologies and lessons learned to future missions.
- Missions shall be developed or conducted with major participation by industry.

MEP MISSIONS

Operating at Mars

Mars Global Surveyor (orbiter)

Mars Odyssey (orbiter)

Mars Exploration Rovers (Spirit and Opportunity)

Support to ESA's Mars Express Orbiter (NASA support to radar system)

Under development or being planned

Mars Reconnaissance Orbiter (launch 2005)

Phoenix Lander (launch 2007)

Mars Science Laboratory (launch 2009)

Mars Telecom Orbiter (launch 2009)

Future options under consideration

Launch	Mission
Opportunity	
2011	Scout (competed)
2013	Mars Sample Return
	OR
	Astrobiology Field Lab (AFL)
2016	Scout (competed)
2018	Deep Drill (10-50 m)
	OR
	Astrobiology Field Lab
	OR
	Mars Sample Return
2020	Scout (competed)

In addition, Mars robotic testbed landers are being investigated for the second decade as platforms for gathering data and providing technology demonstrations as precursors to eventual human missions to Mars. They may begin launching as early as 2011.